

205. (Amended) A composition according to claim 203, wherein said C₁₈ carbon chains are linear octadecyl chains.

REMARKS

I. Status of the Claims

Claims 1-216 are pending in the application. Claims 19, 22, 23, 36, 78, 81, 82, 95, 128, 131, 132, 145, 175, 178, 179, 192, and 205 have been amended as discussed below. No new matter has been added by these amendments.

II. Objection to the Specification

The Examiner states that the attempt to incorporate "essential subject matter" from the CTFA International Cosmetic Ingredient Dictionary is improper. Office Action at p.2. Although they do not agree, Applicants have amended the specification to remove the incorporation by reference of the passages of the CTFA International Cosmetic Ingredient Dictionary by deleting the paragraph bridging pages 10 and 11, and inserting three new paragraphs. The first new paragraph is the exact same passage formerly at p. 10, line 18 to page 11, line 1. The second paragraph is the listing of non-film forming agents from pages 1744 to 1747 of the CTFA International Cosmetic Ingredient Dictionary, 8th edition (2000). The third new paragraph is the exact same passage formerly at page 11, lines 1-10.

Applicants also submit a declaration herewith stating that the amendatory material consists of the same material incorporated by reference in the referencing application. M.P.E.P. § 608.01(p).I.A.2. It is understood that the filing date of the application is not affected by the allegedly improper incorporation by reference. *Id.*

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
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The Examiner states that the attempt to incorporate "essential subject matter" from WO 01/18096 is improper. Accordingly, Applicants have deleted the sentence incorporating WO 01/18096, i.e., the sentence at page 11, lines 11-12, of the specification as filed has been deleted.

Applicants believe that by these amendments, the objection has been overcome, and request that it be withdrawn.

III. Information Disclosure Statement

The Examiner objects to document numbers 12-14 of the PTO-1449 for failing to comply with 37 C.F.R. § 1.98(a)(3), for not including "a concise explanation of the relevance ... of each patent listed that is not in the English language." Office Action at pp. 2-3. Applicants respectfully note that English language abstracts were submitted for the non-English documents. Item 13 of PTO-1449 is the English language abstract for item 12, and item 15 is the English language abstract for item 14. By submission of these English language abstracts, Applicants respectfully request consideration of items 12-15 of PTO-1449 previously submitted on March 30, 2001.

Additionally, Applicants submit a new IDS and PTO 1449 form disclosing the individual documents from the literature searches listed as documents 18-19 of the PTO-1449 submitted with the IDS filed March 30, 2001.

Applicants also submit pages 1744 to 1747 of the CTFA International Cosmetic Ingredient Dictionary and WO 01/18096 in the new IDS.

Accordingly, by these submissions, Applicants believe that the objection has been overcome and should be withdrawn.

FINNEGAN
HENDERSON
FARABOW
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DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

IV. Rejections under 35 U.S.C. § 112, second paragraph

Claims 1-216 are rejected under 35 U.S.C. § 112, second paragraph for indefiniteness. Office Action at pp. 3-4. Applicants respectfully traverse this rejection.

1. The Examiner objects to "C₃-C₅ monosaccharides substituted with at least one C₁-C₂₂ carbon chain" because the meaning is unclear "when the carbon chain is cyclic" or "when the cyclic chain is substituted at the oxygen atom of the saccharide and also at the carbon atom of the saccharide." Office Action at p. 3.

Applicants respectfully disagree that the meaning of this phrase is unclear. The standard of definiteness under 35 U.S.C. § 112, second paragraph, is a reasonable degree of clarity and precision. M.P.E.P. § 2173.02. "Definiteness of claim language must be analyzed, not in a vacuum, but in light of:

- (A) The content of the particular application disclosure;
- (B) The teachings of the prior art; and
- (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made." *Id.*

Applicants understand the Examiner's points and respectfully submit that one of ordinary skill in the art would be able to determine which C₁-C₂₂ carbon chain is cyclic, and which chain is capable of acting as a substituent on any particular portion of the C₃-C₅ monosaccharide. Because the standard of definiteness is viewed from the point of view of one of ordinary skill in the art, Applicants respectfully submit that this phrase is sufficiently definite.

2. Regarding claims 26, 85, 135, and 182, the Examiner objects to "oxidized derivatives of C₃-C₅ monosaccharides" because the "specification at page 15, line 21

does not describe compounds under this category.” Office Action at p. 3. Again, Applicants respectfully submit that oxidized derivatives of C₃-C₅ monosaccharides are known in the art and thus, its meaning is understood by one of ordinary skill in the art. Thus, this phrase is sufficiently definite.

3. The Examiner objects to claims 27, 86, 136, and 183 because it is allegedly “unclear” how an oligosaccharide can derive from a monosaccharide. Office Action at p. 3. Applicants respectfully submit that one of ordinary skill in the art would readily understand the meaning of “derivatives of C₃-C₅ monosaccharides,” as recited in the claims from which claims 27, 86, 136, and 183 depend. Additionally, one of ordinary skill in the art would understand that a C₃-C₅ monosaccharide can act as a substituent on another C₃-C₅ monosaccharide to form a derivative. Thus, several C₃-C₅ monosaccharides linked together can be an oligosaccharide that is derived from C₃-C₅ monosaccharides. Accordingly, it is believed that claims 27, 86, 136, and 183 have sufficient antecedent basis.

4. Regarding claims 29, 88, 138, and 185, the Examiner objects to “derivatives of C₃-C₅ monosaccharides are further substituted with at least one group different from said at least one C₁-C₂₂ carbon chain” because “the specification does not define suitable substituents in this category.” Office Action at p. 4. Applicants respectfully submit that the specification provides several examples of these different groups. See p. 15, line 15 to p. 16, 8. For example, the derivatives of C₃-C₅ monosaccharides can be imine derivatives, hemiacetal derivatives, and hemiketal derivatives, among others. *Id.* Accordingly, in light of the specification, it is believed that this phrase is sufficiently definite.

5. Regarding claims 31, 140, and 187, the Examiner objects to "at least one of C₁-C₂₂ carbon chains is substituted" because "the specification does not define suitable substituents in this category." Office Action at p. 4. Applicants respectfully submit that derivatives of C₁-C₂₂ carbon chains are well known in the art and one of ordinary skill in the art can readily recognize groups capable of substituting on C₁-C₂₂ carbon chains. Accordingly, it is believed that this phrase is sufficiently definite.

6. Regarding claims 36, 95, 145, and 192, Applicants believe that these claims as originally filed are sufficiently clear. Nevertheless, to expedite prosecution, Applicants have amended claims 36, 95, 145, and 192 to recite "wherein said at least one compound is substituted with said at least one C₁-C₂₂ carbon chain at a CH₂ position of said C₃-C₅ monosaccharides." It is believed that this amendment in no way narrows the scope of the claims.

7. Claim 205 has been amended to depend from claim 203 instead of claim 204. By this amendment, it is believed that the limitations of claim 205 have sufficient antecedent basis and that this amendment in no way narrows the scope of the claims.

8. The Examiner objects to "chosen from" in claims 19, 22, 23, 78, 81, 82, 128, 130, 131, 175, 178, and 179, because these claims recite "only one compound." Office Action at p. 4. Applicants note that claim 130 recites more than one compound, i.e., "aldotrioses and ketotrioses" and believe that the objection should have been directed to claim 132. Applicants further submit that these claims as originally filed are sufficiently clear. Nonetheless, to expedite prosecution, these claims have been amended to delete "chosen from." It is believed that these amendments in no way narrow the scope of the claims.

Accordingly, by these remarks and amendments, Applicants respectfully request that the rejections be withdrawn.

V. Rejection under 35 U.S.C. § 103

Claims 1-15, 30, 38-40, 53-74, 89, 97-100, 110-124, 139, 147-150, 160-171, 186, 194-197, and 207-216 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Harry's Cosmeticology at pp. 470-483, U.S. Patent No. 6,235,298 ("Naser et al."), and U.S. Patent No. 5,688,930 ("Bertho et al."). Office Action at pp. 4-6. Applicants respectfully traverse this rejection.

The Examiner asserts that Harry's Cosmeticology at pp. 475-478 teaches at least one film-forming agent and additives yet concedes that it does not teach "the specific Polyquaternium claimed." Office Action at p. 5. Thus, the Examiner relies on Naser for disclosing "polyquaternium claimed in the instant application" and for teaching polysaccharides. *Id.* at pp. 5-6. The Examiner further admits that neither Harry's Cosmeticology nor Naser discloses the at least one compound as claimed and thus relies on Bertho. *Id.* at p. 6. According to the Examiner, it would have been obvious "to prepare compositions of Harry's Cosmeticology and [Naser] and combine it with the substituted saccharides of [Bertho], expecting beneficial effect to the hair ... from the teachings of [Bertho] that the compositions provide emulsifying, foaming and wetting and dispersant properties." *Id.*

An Examiner must demonstrate in order to establish a *prima facie* case of obviousness that there is some suggestion or motivation, either in the references

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. See M.P.E.P. § 2143.

Applicants respectfully submit that the combination of references is improper. One would have to selectively pick and choose among isolated passages of Harry's Cosmeticology, Naser, and Bertho to arrive at the claimed invention. Chapter 25 of Harry's Cosmeticology is entitled "Hair Setting Lotions, Sprays and Dressings." The passage in Harry's Cosmeticology discussed by the Examiner (pp. 475-478) is directed to hair sprays. "The objective of a hair spray ... is to deposit onto the dry hair an invisible film to protect it against all external agents ..." See p. 475. This reference continues to state that the requirements for a hair spray "are stringent and numerous" and lists at least seven objectives. *Id.*

Naser is directed to a "liquid surfactant composition, e.g., liquid shower gels or liquid shampoos." Col. 1, lines 5-6. Naser teaches that the composition can include a topically active compound and lists numerous examples of topically active compounds. Col. 4, line 65 to col. 10, line 25. One example of a topically active compound is "a hair fixative or film former," and Naser provides a long list of exemplary hair fixatives. Col. 7, lines 19-47. Thus, one of ordinary skill in the art would have to first select a hair fixative from the long list of topically active compounds, and then choose the polyquaternium among the numerous exemplary film formers, without any specific motivation to do so.

Moreover, Applicants respectfully disagree that the "beneficial" aspects, as alleged by the Examiner, of "emulsifying, foaming and wetting and dispersant properties" would guide one of ordinary skill in the art to combine Harry's Cosmeticology and Naser with Bertho. As discussed above, Harry's Cosmeticology sets forth

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

"stringent and numerous" requirements for a useful hair spray. None of these requirements include "emulsifying, foaming and wetting and dispersant properties." Because the references fail to provide specific guidance to arrive at this combination, a *prima facie* case of obviousness has not been established.

Accordingly, Applicants respectfully request withdrawal of the rejection.

VI. Double Patenting

Claims 1-55 and 167-216 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 101, 103-105, 115, 121, 123-127, 129-131, 142-152, 161, 166, 168-172, 174-177, and 187-204 of copending Application No. 09/820,812. Office Action at p. 7.

Claims 1-55 and 167-216 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9, 13-19, and 29-59 of copending Application No. 09/820,934. *Id.* at pp. 7-8.

Applicants respectfully disagree with these rejections. Nonetheless, in order to advance prosecution, Applicants have filed herewith a Terminal Disclaimer to obviate the provisional obviousness-type double patenting rejection based on copending Application Nos. 09/820,812 and 09/820,934. Entry of this Terminal Disclaimer and withdrawal of these rejections are respectfully requested.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

VII. Conclusion

Applicants respectfully request the reconsideration and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P

By: Maria Bantet Reg. No. 52,516
for Anthony C. Tridico
Reg. No. 45,958

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FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

APPENDIX: MARKED-UP COPY OF AMENDED SPECIFICATION

[Non-limiting examples of the at least one film forming agent are those disclosed in WO 01/18096, the disclosure of which is incorporated herein by reference.]Other non-limiting examples of the at least one film forming agent include copolymers derived from (i) at least one vinyl monomer comprising at least one quaternary ammonium group and (ii) at least one additional monomer chosen from acrylamide, methacrylamide, alkyl acrylamides, dialkyl acrylamides, alkyl methacrylamides, dialkyl methacrylamides, alkyl acrylate, alkyl methacrylate, vinyl caprolactone, vinyl pyrrolidone, vinyl esters, vinyl alcohol, maleic anhydride, propylene glycol, and ethylene glycol.

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DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

APPENDIX: MARKED-UP COPY OF AMENDED CLAIMS

19. (Amended) A composition according to claim 17, wherein said tetroses are [chosen from] erythrulose.

22. (Amended) A composition according to claim 21, wherein said trioses are [chosen from] glyceraldehyde.

23. (Amended) A composition according to claim 21, wherein said trioses are [chosen from] dihydroxyacetone.

36. (Amended) A composition according to claim 1, wherein said at least one compound is substituted with said at least one C₁ to C₂₂ carbon chain at a [C₁] CH₂ position of said [at least one compound] C₃-C₅ monosaccharides.

78. (Amended) A method according to claim 76, wherein said tetroses are [chosen from] erythrulose.

81. (Amended) A method according to claim 80, wherein said trioses are [chosen from] glyceraldehyde.

82. (Amended) A method according to claim 80, wherein said trioses are [chosen from] dihydroxyacetone.

95. (Amended) A method according to claim 57, wherein said at least one compound is substituted with said at least one C₁ to C₂₂ carbon chain at a [C₁] CH₂ position of said [at least one sugar] C₃-C₅ monosaccharides.

128. (Amended) A method according to claim 126, wherein said tetroses are [chosen from] erythrulose.

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DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
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131. (Amended) A method according to claim 130, wherein said trioses are [chosen from] glyceraldehyde.

132. (Amended) A method according to claim 130, wherein said trioses are [chosen from] dihydroxyacetone.

145. (Amended) A method according to claim 117, wherein said at least one compound is substituted with said at least one C₁ to C₂₂ carbon chain at a [C₁] CH₂ position of said [at least one sugar] C₃-C₅ monosaccharides.

175. (Amended) A composition according to claim 173, wherein said tetroses are [chosen from] erythrulose.

178. (Amended) A composition according to claim 177, wherein said trioses are [chosen from] glyceraldehyde.

179. (Amended) A composition according to claim 177, wherein said trioses are [chosen from] dihydroxyacetone.

192. (Amended) A composition according to claim 167, wherein said at least one compound is substituted with said at least one C₁ to C₂₂ carbon chain at a [C₁] CH₂ position of said [at least one compound] C₃-C₅ monosaccharides.

205. (Amended) A composition according to claim [204] 203, wherein said C₁₈ carbon chains are linear octadecyl chains.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

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Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com